



**JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY**  
**SCHOOL OF INFORMATICS AND INNOVATIVE SYSTEMS**  
**UNIVERSITY EXAMINATION FOR THE DEGREE OF BACHELOR OF ARTS IN**  
**BUSINESS ADMINISTRATION WITH I.T**  
**3<sup>RD</sup> YEAR 1<sup>ST</sup> SEMESTER 2018/2019 ACADEMIC YEAR**  
**NAIROBI/NAMBALE CAMPUS**

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**COURSE TITLE: INTERNET COMPUTING**

**COURSE CODE: SCS 306**

**DATE: 16/08/2019**

**EXAM SESSION 9.00 – 11.00am**

**TIME: 2 HOURS**

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**INSTRUCTIONS**

- 1. Answer question 1 (compulsory) and ANY other 2 questions.**
- 2. Candidates are advised not to write on the question paper.**
- 3. Candidates must hand in their answer booklets to the invigilator while in the examination room.**

**QUESTION ONE 30 MARKS**

- a. Identify and explain briefly four functions of communication protocols in data transmission. **(4 marks)**
- b. Distinguish the following terms; Internet, Intranet and Extranet **(6 marks)**
- c. Discuss any four services provide by the Internet. **(12 marks)**
- d. Analyze the layers of the TCP/IP protocol suite. **(8 marks)**

### QUESTION TWO 20 MARKS

- a. With the aid of example, highlight the role of the following software in the context of the internet:
  - (i) Browser software. **(3 marks)**
  - (ii) Client – side software. **(3 marks)**
  - (iii) Server-side software. **(3 marks)**
- b. Identify three methods that you could use to connect your home to the internet. **(3 marks)**
- c. Explain the purpose of the following components in an internet environment:
  - (i) Firewall **(2 marks)**
  - (ii) Encryption **(2 marks)**
- d. Outline four problems associated with electronic mail applications. **(4 marks)**

### QUESTION THREE 20 MARKS

- a) Outline six common hacking tactics and security exploits within the internet **(6 marks)**
- b) Write short notes on LAN and WAN? **(4 marks)**
- c) What are Internet Protocols, List four uses of an Internet protocol? **(5 marks)**
- d) Highlight five functionalities that email allows you to do while on the internet **(5 marks)**

### QUESTION FOUR 20 MARKS

- a) Briefly describe search engine as used in Internet Computing **(4 marks)**
- b) Describe any five topologies used by organizations. **(5 marks)**
- c) Discuss five problems arising from internet use. **(5 marks)**
- d) Briefly discuss transmission media used in computer networks **(6 marks)**

### QUESTION FIVE 20 MARKS

- (a) Write down the correct HTML tags to accomplish the following:
  - (i) Adding a background color **(2 marks)**
  - (ii) Make text bold **(1 mark)**
  - (iii) Create a hyperlink **(3 marks)**
  - (iv) Create a bullet list **(4 marks)**
- (b) What benefits would a learning institution gain by embracing video conferencing? **(10 marks)**